

B 347

12dec05 16:22:57 User014961 Session D7843.1

Sub account: S.MOORE/JAP.PATENTS

\$0.00 0.205 DialUnits FileHomeBase

\$0.00 Estimated cost FileHomeBase

\$0.06 INTERNET

\$0.06 Estimated cost this search

\$0.06 Estimated total session cost 0.205 DialUnits

File 347:JAPIO Nov 1976-2005/Jul (Updated 051102)

(c) 2005 JPO & JAPIO

Set Items Description

--- -----

?

SS PN=JP 2002212503

S1 1 PN=JP 2002212503

?

T 1/5/1

1/5/1

DIALOG(R)File 347:JAPIO

(c) 2005 JPO & JAPIO. All rts. reserv.

07344012

FILM-FORMING COMPOSITION, METHOD FOR PRODUCING THE COMPOSITION, METHOD  
FOR  
FORMING POROUS FILM, AND THE POROUS FILM

PUB. NO.: 2002-212503 [JP 2002212503 A]

PUBLISHED: July 31, 2002 (20020731)

INVENTOR(s): YAGIHASHI FUJIO

IWABUCHI MOTOAKI

YAMAMOTO AKIRA

APPLICANT(s): SHIN ETSU CHEM CO LTD

APPL. NO.: 2001-006614 [JP 20016614]

FILED: January 15, 2001 (20010115)

INTL CLASS: C09D-183/04; B05D-003/02; B05D-005/06; B05D-007/24;  
C08F-002/44; C08F-283/12; C09D-133/06; H01L-021/312;  
H01L-021/316

#### ABSTRACT

PROBLEM TO BE SOLVED: To provide a film-forming composition capable of forming a film that is porous, flat and uniform, and further has a low dielectric constant and a high mechanical strength, and therefore is most suitable as an insulating interlayer film when it is used in producing a semiconductor device, by using the composition.

SOLUTION: This silicone-containing film-forming composition contains  
(A) a

silanol group-containing silicone resin having a number-average molecular weight of  $\geq 100$  and (B) a polymer which is formed by polymerizing monomer(s) comprising acrylic ester(s), methacrylic ester(s) or a mixture thereof, wherein the silanol group-containing silicone resin contains a structural unit (T unit) expressed by the general formula (1):  $R_1-SiZ_3$  ( $R_1$  is a monovalent hydrocarbon radical which may be substituted or unsubstituted; and  $Z$  is OH, a hydrolyzable group or a siloxane residue, provided that at least one of  $Z$ s is a siloxane residue) in an amount of 30-100 mol%, and 30-80 mol% of the T units each comprise a structural unit (T-2 unit) which has a silanol group and is expressed by the general formula (2):  $R_1-Si(OH)Z'2$  ( $Z'$  is a siloxane residue).

COPYRIGHT: (C)2002,JPO  
?